



### **PATENT**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Customer Number: 31824

Dennis L. Parker, et al.

Confirmation Number: 2162

Patent No.: 7,120,290

Group Art Unit: 2624

Issued: October 10, 2006

Examiner: Yosef Kassa

For:

METHOD AND APPARATUS FOR:

ENHANCING AN IMAGE USING

DATA OPTIMIZATION AND

**SEGMENTATION** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## TRANSMITTAL OF GENERAL POWER OF ATTORNEY

Sir:

Transmitted herewith is a general Power Of Attorney which revokes all previous powers of attorney and associates the subject patent with our Customer Number (31824).

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

James W. Hill, MD

Registration No. 46,396

18191 Von Karman Ave., Suite 500

Irvine, CA 92612-7108

Phone: 949.851.0633 JWH:ll Facsimile: 949.851.9348

Date: October 27, 2006

Please recognize our Customer No. 31824 as our correspondence address.

OCT 3 1 2006 Doc Code Under the Pape

PTO/SB/80 (01-06)

Approved for use through 12/31/2008. OMB 0851-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

<u> </u>					=			
I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).								
I hereby a								
Practitioners associated with the Customer 31824								
OR  Practitioner(s) named below (if more then ten practitioners are to be named, then a customer number must be used):								
Name F		Registration Na		ime	Registration Number			
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as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).								
		espondence address for the					ment under 3	7 CFR 3.73(b) to:
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The ac	ddress assoc	ciated with Customer						
OR			<u> </u>					
Firm or Individu	ial Name	·						
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	Name and A	Address: search Foundation						
615 Arapeen Drive, Suite 310								
Salt Lake City, UT 84108								
A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.								
SIGNATURE of Assignee of Record								
The individual whose signature and title is supplied below is authorized to act on behalf of the assignee								
Signature	RU	Culkarni					Date	9/19/06
Name	Rajiv Kull	arni, Ph.D., M.B.A.					Telephone	(801) 581-7792
Title	Senior Tec	hnology Licensing Manage	r					

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

OCT 3 1 2006

PTO/SB/96 (06-04) Approved for use through 07/31/2006. OMB 0651-0031
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	STATEMEN	TUNDER 37 CFR 3.73(b)	
Applicant/Patent Owner:	Dennis L. PARKER, et al.		
Application No./Patent No:	7,120,290	Filed/Issue Date: October 10, 200	6 ·
Entitled: SEGMENTATIO	N	CING AN IMAGE USING DATA OPTIM	IZATION AND
University of Utah Research	Foundation , a	Utah corporation	
(Name of Assignee)		(Type of Assignee, e.g., corporation, partnershi	p, university, government agency, etc.)
states that it is:			
1.  the assignee of the en	tire right, title, and interest; o	r .	
2.   an assignee of less the	an the entire right, title and ir	nterest.	
The extent (by percent	tage) of its ownership interes	t is %	
in the patent application/pat	ent identified above by virtue	of either:	
A. [⊠] An assignment from in the United States attached.	the inventor(s) of the patent Patent and Trademark Office	application/patent identified above. The at Reel, Frame, or for w	e assignment was recorded which a copy thereof is
OR			
B. [ ] A chain of title from t below:	he inventor(s), of the patent	application/patent identified above, to t	he current assignee as shown
1. From:		To:	
	t was recorded in the United	States Patent and Trademark Office a	nt .
	rame, or for which a c		
2. From:		To:	
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[ ] Additional do	cuments in the chain of title a	re listed on a supplemental sheet.	
[NOTE: A separate co		ain of title are attached.  ginal assignment document(s)) must be the assignment is to be recorded in the	
The undersigned (whose title	e is supplied below) is autho	rized to act on behalf of the assignee.	
	mh		October 27, 2006
	Signature		Date
Jan	nes W. Hill, MD, Reg. No. 46	,396	(949) 851-0633
	Printed or Typed Name		Telephone Number
	Attorney for the Assignee Title		
	1100		

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

1. UL

PATENT

Client Code: UNIUTAH.003NP

Page 1

## Patent No.: US 6,674,894 B1 Issue Date: January 6, 2004

#### ASSIGNMENT

WHEREAS, We, Dennis L. Parker, a United States citizen, residing at 727 North 700 East, Centerville, Utah 84014, Andrew L. Alexander, a United States citizen, residing at 510 North Blackhawk Avenue, Madison, Wisconsin 53705, John A. Roberts, a United States citizen, residing at 1111 East 400 South, Salt Lake City, Utah 84102, and Brian E. Chapman, a United States citizen, residing at 3709 Perrysville, Pittsburgh, Pennsylvania 15214, have invented certain new and useful improvements in a METHOD AND APPARATUS FOR ENHANCING AN IMAGE USING DATA OPTIMIZATION AND SEGMENTATION for which a Letters Patent in the United States has been issued on January 6, 2004 as Patent No. 6,674,894 B1 (hereinafter "the Patent").

AND WHEREAS, University of Utah (hereinafter "ASSIGNEE"), a Utah Corporation, with its principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108, desires to acquire the entire right, title, and interest in and to the invention disclosed in the Patent:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest throughout the world in, to, and under the said improvements, and the Patent and all Letters Patent that may be granted thereon, and all provisional applications relating thereto, and all divisions, continuations, reissues, reexaminations, renewals, and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals, and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements and all Letters Patents resulting from the Patent to ASSIGNEE, its successors, legal representatives, and assigns, in accordance with the terms of this Agreement.

AND WE DO HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including but not limited to, the right to sue for, collect, and retain damages for past infringements of the Patent before or after issuance.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives, and assigns any facts known to us respecting the Patent immediately upon becoming aware of those facts, and testify in any legal proceeding involving the Patent, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and will generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce the Patent in all countries.

OCT 3 1 2006

Patent Do.: US 6,674,894 B1 HADE Date: January 6, 2004

PATENT Client Code: UNIUTAH.0031\P

Page 2

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 21 day of March

STATE OF

COUNTY OF SLC

On March 21, 2006 before me, Teresa Van 2005 ende appeared Dennis L. Parker personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that, by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Witness Signature (excluding notarial jurat above)



NOTARY PUBLIC eresa Van Roosendaal

615 Arapeen Drive #310 Salt Lake City, Utah 84108 My Commission Expires January 25, 2009 STATE OF UTAH

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Patent No.: US 6,674,894 B1

PATENT Client Code: UNIUTAH.003NP

Page 3

Issue Date: January 6, 2004

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 21 day of February, 20/X.

Andrew L. Alexander

STATE OF WI

SS.

COUNTY OF DANE

On <u>J-21-0b</u>, before me, <u>Toby Schellent</u>, personally appeared Andrew L. Alexander personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that, by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

Notary Signature

Witness Signature (excluding notarial jurat above

expires 6/21/09

PATENT

Client Code: UNIUTAH.003NP

Page 4

Patent No.: US 6,674,894 B1 Issue Date: January 6, 2004

IN TESTIMONY WHEREOF, I hereunto set my hand and segl this 21

Roberts John A

STATE OF

COUNTY OF Salt Lake

On <u>March 21,2006</u>, before me, <u>Leslie S. Albaugh</u> personally appeared John A. Roberts personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that, by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

NOTARY PUBLIC LESLIE S. ALBAUGH 615 Arapeen Dr., Sta. 310 Selt Lake City, Utah 84108 My Commission Expires | March 12, 2008 | STATE OF UTAH

Witness Signature (excluding notarial jurat above)

**PATENT** 

Client Code: UNIUTAH.003NP

Page 5

Patent No.: US 6,674,894 B1 Issue Date: January 6, 2004

IN TESTIMONY WHEREOF, I hereunto set my hand and soal this

\_\_, 20;66

Brian E. Chapman

STATE OF PENNSYLVANIA }

COUNTY OF ALLEGHENY }

STATE OF PENNSYLVANIA }

On <u>FEB 23 2001</u>, before me, <u>MARY Lou SOSSO</u>, personally appeared Brian E. Chapman personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that, by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official scal.

(SEAL)

Notary Signature

Witness Signature (excluding notarial jurat above)

Notarial Seal Mary Lou Sosso, Notary Public

City Of Pittsburgh, Allegheny County
My Commission Expires Apr. 3, 2009

Member, Pennsylvenia Association of Notaries

1. 01

PATENT

Client Code: UNIUTAH.003NP

Page 1

Patent No.: US 6,674,894 B1 Issue Date: January 6, 2004

#### ASSIGNMENT

WHEREAS, University of Utah, a Utah corporation having offices at 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 (hereinafter "ASSIGNOR"), represents and warrants that it is the sole owner of the entire right, title, and interest to certain new and useful improvements for which ASSIGNOR has filed the following United States issued Letters Patent in the United States (hereinafter "the Patent"):

Patent No.	Issue Date	<u>Title</u>
6,674,894	January 6, 2004	METHOD AND APPARATUS FOR ENHANCING AN IMAGE USING DATA OPTIMIZATION AND SEGMENTATION

WHEREAS, University of Utah Research Foundation, a Utah corporation having offices at 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 (hereinafter "ASSIGNEE") desires to purchase the entire right, title, and interest in and to the inventions disclosed in the Patent;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) to ASSIGNOR, and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby further acknowledges that it has sold, assigned, and transferred, and by these presents does hereby sell, assign, and transfer, unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest throughout the world in, to, and under the said improvements, and the Patent and all Letters Patents that may be granted thereon, and all provisional applications relating thereto, and all divisions, continuations, reissues, reexaminations, renewals, and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent that may be filed for said improvements or for the Patent in any country or countries foreign to the United States, and all extensions, renewals and reissues thereof; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements and all Letters Patents resulting from the Patent to ASSIGNEE, its successors, legal representatives, and assigns, in accordance with the terms of this Agreement.

ASSIGNOR does hereby sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including but not limited to, the right to sue for, collect, and retain damages for past infringements of the Patent before or after issuance;

ASSIGNOR hereby covenants and agrees that it will communicate to ASSIGNEE, its successors, legal representatives, and assigns any facts known to ASSIGNOR respecting the Patent immediately upon becoming aware of those facts, and that it will testify in any legal proceeding involving the Patent, will sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and will generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives, and assigns to obtain and enforce the Patent in all countries.

Patent No.: US 6,674,894 B1

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PATENT

Client Code: UNIUTAH.003NP

Page 2

Issue Date: January 6, 2004

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 215th day of March, 2006

	University of Utah
Ву:	RKKulkarni
Name I	Printed: Rajiv K. Kulkarni
Title:	Senior Technology Licensing Manage
Date:	March 21, 2006

STATE OF Utah

COUNTY OF Sut Lake } \*\*

On Morch 21, 2006, before me, Lesus 5 Albangh, personally appeared Rajiv K. Kulkarm' personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacity(ies), and that, by their signature on the instrument, the entiry upon behalf of which the person acted executed the instrument.

WITNESS my hand and official seal.

[SEAL]

NOTARY PUBLIC LESLIE S. ALBAUGH 616 Arapeen Dr., Ste. 310 Sant Lake Cny, Utah 84108 My Commission Explres March 12, 2008 STATE OF UTAH

lotary Signature

Witness Signature (excluding notarial jurat above)

# MEMORANDUM

27 August 2003 Date:

Rajiv K. Kulkarni, Senior Technology Licensing Manager, To:

Technology Transfer Office

From: Ray Gesteland, Vice President for Research, University of Utah

President, University of Utah Research Foundation

Subject: Delegation of Signatory Authority

This Memorandum confirms the continuing authorization, granted you since 17 September 2001, to execute and sign documents on behalf of the University of Utah and the University of Utah Research Foundation for patent documents, confidential disclosure agreements and biological and materials transfer agreements.

Raymond, F. Gesteland, Ph.D.

Vice President for Research University of Utah

President

University of Utah Research Foundation